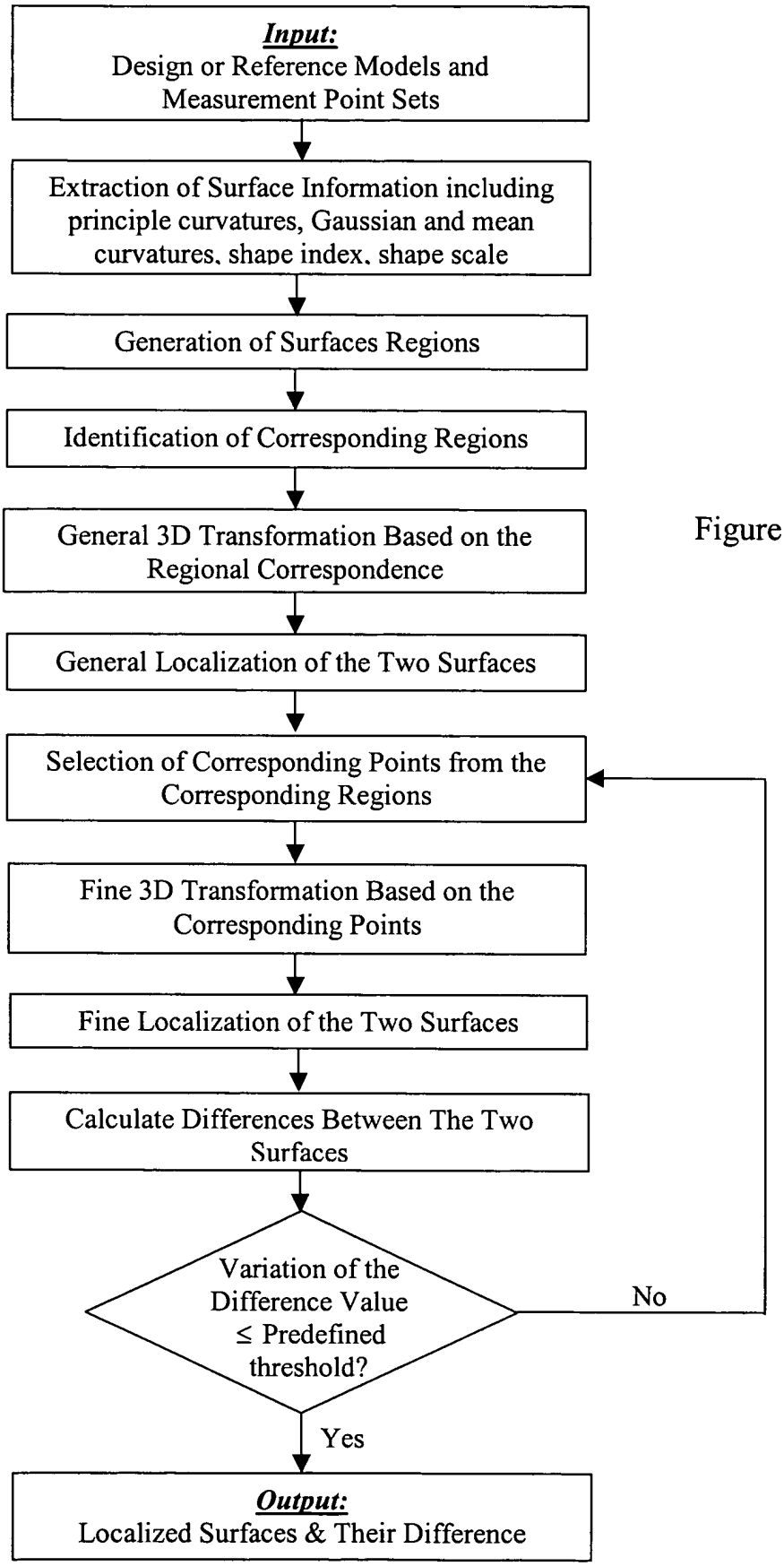
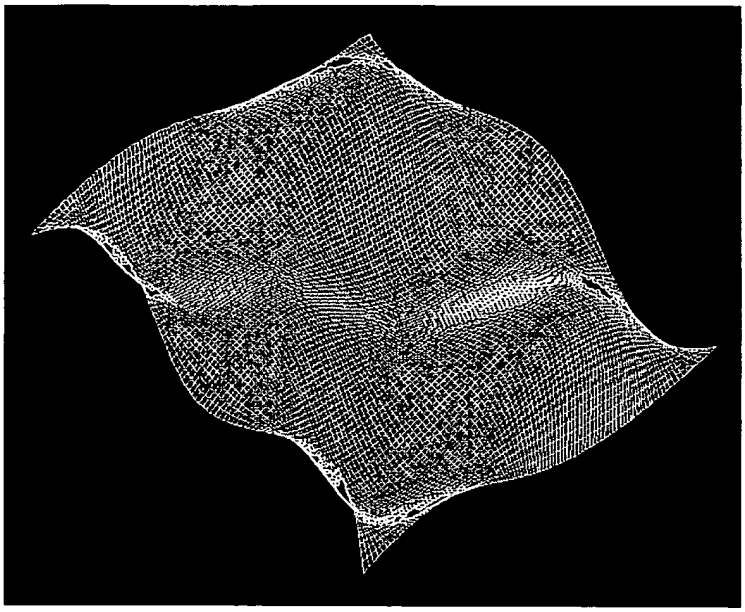
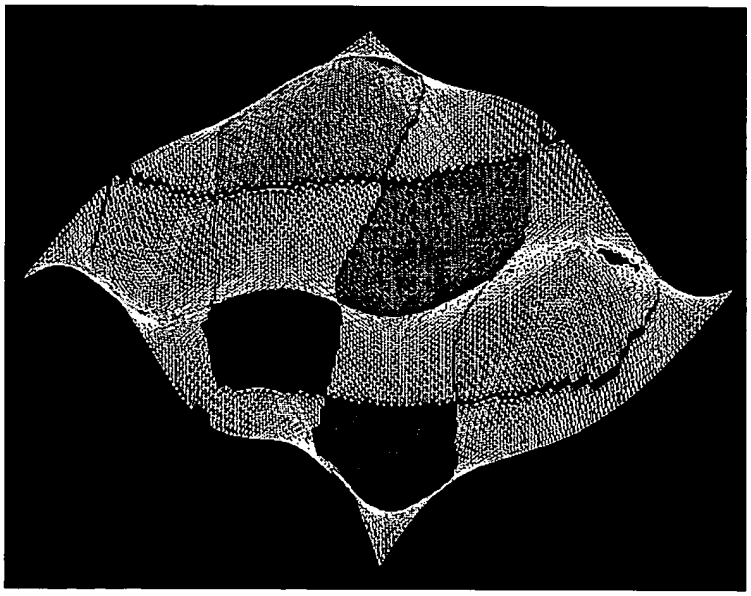

Input:
Design or Reference Models and Measurement Point Sets
Extraction of Surface Information including principle curvatures, Gaussian and mean curvatures, shape index, shape scale
Generation of Surfaces Regions
Identification of Corresponding Regions
General 3D Transformation Based on the Regional Correspondence
General Localization of the Two Surfaces
Selection of Corresponding Points from the Corresponding Regions
Fine 3D Transformation Based on the Corresponding Points
Fine Localization of the Two Surfaces
Calculate Differences Between The Two Surfaces
Variation of the Difference Value ≤ Predefined threshold?
No
Yes
Output:
Localized Surfaces & Their Difference

Figure 1



(A) surface before region partitioning



(B) surface after region partitioning

FIGURE 2

BEST AVAILABLE COPY

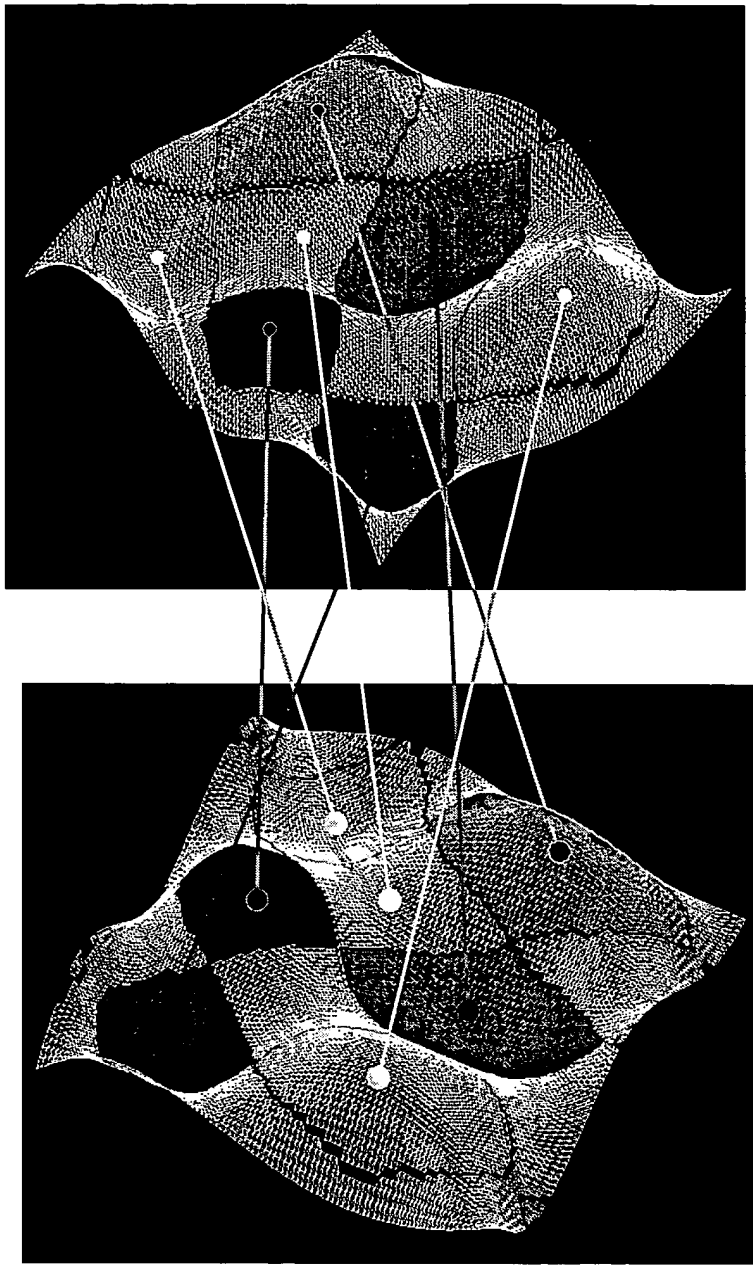


FIGURE 3

BEST AVAILABLE COPY

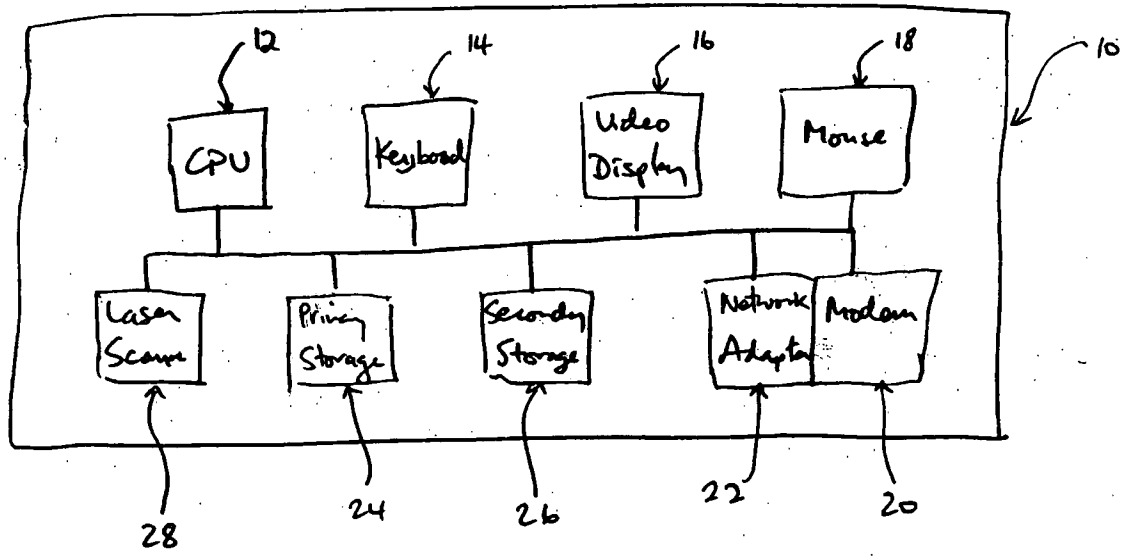


FIG. 4

BEST AVAILABLE COPY